AMENDMENTS TO THE CLAIMS

Claim 1 (Previously Presented) A method of preparing a collagen sponge, comprising:

- preparing a collagen gel,
- mixing air into the collagen gel, so as to obtain a collagen foam,
- drying the collagen foam, so as to obtain a dry block of collagen sponge having a three-dimensional structure with stacked chambers which are separated and substantially totally enclosed by walls of collagen material,
- isolating, from the block of collagen sponge, parts of sponge showing at least one of:
- a chamber diameter of more than 0.75 mm and less than 4 mm, and
- an average chamber diagonal dimension of 3 mm.

Claim 2 (Original) A method according to claim 1, wherein the collagen content of the isolated parts of sponge is 50 to 100%.

Claim 3 (Original) A method according to claim 2, wherein the collagen gel comprises collagen material of different types from at least one of the following sources: mammalian, transgenic and recombinant sources.

Claim 4 (Original) A method according to claim 3, wherein the collagen comprises material from tendons selected from the group consisting of equine tendons, bovine tendons and human tendons.

Claim 5 (Previously Presented) A method according to claim 3, wherein said preparing the collagen gel comprises:

- storing the tendons at a temperature between -10° C and -30° C, and peeling the tendons,
- removing foreign protein from the tendons,
- reducing germ content in the tendons,
- swelling the tendons,

- homogenizing the swelled tendons.

Claim 6 (Previously Presented) A method according to claim 5, wherein said reducing germ content comprises adding an acid and an organic solvent to the tendons.

Claim 7 (Previously Presented) A method according to claim 6, wherein the acid is an organic acid.

Claim 8 (Previously Presented) A method according to claim 6, wherein the organic solvent is an alcohol.

Claim 9 (Previously Presented) A method according to claim 5, wherein said swelling the tendons comprises adding lactic acid to the tendons.

Claim 10 (Previously Presented) A method according to claim 7 ~~5~~, wherein the acid has a pH value in the range of 1 to 4.

Claim 11 (Previously Presented) A method according to claim 41 ~~5~~, wherein the lactic acid is a 0.45% lactic acid.

Claim 12 (Previously Presented) A method according to claim 5, wherein said swelling the tendons comprises storing the tendons at a temperature of 4° C to 25° C for a period of 48 to 200 hours.

Claim 13 (Original) A method according to claim 12, wherein the tendons are stored for a period of 100 to 120 hours.

Claim 14 (Previously Presented) A method according to claim 5, wherein said homogenizing the swelled tendons comprises obtaining a substance comprising particles of tendons, the particles having a length or diameter of 0.8 to 1.2 cm.

Claim 15 (Previously Presented) A method according to claim 5, wherein said homogenizing the swelled tendons comprises obtaining a substance having a viscosity of 2 to 20 Ncm.

Claim 16 (Previously Presented) A method according to claim 5, wherein said homogenizing the swelled tendons is carried out by means of a toothed disk mill.

Claim 17 (Original) A method according to claim 1, wherein the collagen gel has a dynamic viscosity of 2-20 Ncm.

Claim 18 (Currently Amended) A method according to claim 1, wherein said ~~the step of~~ mixing air into the collagen gel comprises:

- mixing ambient air into the gel with a mixer so as to generate a collagen foam,
- feeding the mixed gel foam into a fractionizing channel, and
- separating collagen gel and collagen foam contained in the fractionizing channel.

Claim 19 (Previously Presented) A method according to claim 18, wherein at least some of the collagen gel separated from the collagen foam in the fractionizing channel is led back to the mixer.

Claim 20 (Previously Presented) A method according to claim 19, wherein the ratio between the amount of collagen gel which is led back to the mixer from the fractionizing channel and the amount of fresh collagen gel led to the mixer is between 0.1 and 0.5.

Claim 21 (Previously Presented) A method according to claim 18, wherein said separating collagen gel and collagen foam comprises:

- separating a selected part of the collagen foam contained in the fractionizing fractionising channel, and
- leading the selected part of the collagen foam out of the fractionizing channel for drying thereof.

Claim 22 (Previously Presented) A method according to claim 18, further comprising maintaining a temperature between 15° C and 40° C in the fractionizing channel.

Claim 23 (Previously Presented) A method according to claim 1, further comprising, subsequent to said mixing air into the collagen gel, homogenizing the collagen foam for a period of 2 to 4 minutes.

Claim 24 (Previously Presented) A method according to claim 1, further comprising, prior to said drying the collagen foam and subsequent to said mixing air into the collagen gel, adding a neutralizer to the collagen foam and neutralizing the collagen foam in order to achieve a pH-value in the collagen foam between 6.5 and 8.5.

Claim 25 (Previously Presented) A method according to claim 24, wherein the neutralizer comprises an ammonia solution.

Claim 26 (Previously Presented) A method according to claim 24, wherein the collagen foam is neutralized for a period of 5-30 hours.

Claim 27 (Previously Presented) A method according to claim 26, wherein the collagen foam is neutralized for a period of 20-30 hours.

Claim 28 (Previously Presented) A method according to claim 1, wherein said drying comprises drying at a temperature between 15° C and 60° C for a period of 48-200 hours, so as to obtain a dry collagen sponge.

Claim 29 (Previously Presented) A method according to claim 28, wherein said drying is carried out at a pressure of 700 to 900 mbar.

Claim 30 (Previously Presented) A method according to claim 1, wherein said drying comprises drying at a temperature between 15° C and 40° C for a period of 100-200 hours.

Claim 31 (Previously Presented) A method according to claim 1, wherein the collagen sponge fulfils at least one of the following criteria:

- pH-value between 5.0 and 6.0,
- lactic acid content at the most 5%,
- ammonium content at the most 0.5%,
- soluble protein content, calculated as albumin content, at the most 0.5%,
- sulphate ashes content at the most 1.0%,
- heavy metal content at the most 20 ppm,
- microbiological purity, at the most 10^3 CFU/g,
- collagen content of 75 to 100%,
- density of 1 to 10 mg/cm^3,
- elasticity module in the range of 5-100 N/cm^2.

Claim 32 (Original) A method according to claim 1, wherein the collagen sponge has a water content of not more than 20%.

Claim 33 (Previously Presented) A method according to claim 1, wherein said isolating parts of collagen sponge comprises dividing the collagen sponge into a plurality of parts by cutting.

Claim 34 (Previously Presented) A method of preparing a collagen sponge, comprising:

- preparing a collagen gel,
- mixing air into the collagen gel, so as to obtain a collagen foam,
- drying the collagen foam, so as to obtain a dry block of collagen sponge having a three-dimensional structure with stacked chambers which are separated and substantially totally enclosed by walls of collagen material,
- isolating, from the block of collagen sponge, parts of sponge having the following properties:
- elasticity module in the range of 5 to 100 N/cm^2,
- density in the range of 1 to 10 mg/cm^3,

and at least one of:

- chamber diameter of more than 0.75 mm and less than 4 mm, and
- a chamber diameter average of at most 3 mm.

Claim 35 (Withdrawn) A device for extracting a part of a collagen foam and for degenerating another part of the collagen foam to a collagen gel, comprising:

- a fractionising channel comprising an inlet for receiving a flow of collagen foam, an outlet for a part of the flow of collagen foam, and a bottom portion which is inclined downwards in the direction of the flow of collagen foam,
- at least one outlet for collagen gel at the bottom portion of the fractionising channel, wherein the position of the outlet is movable in a vertical direction at an end of the fractionising channel.

Claim 36 (Withdrawn) An elongated collagen sponge having a through-going passage and a flexible wall.

Claim 37 (Withdrawn) An elongated collagen sponge according to claim 36 and having a cross-section which is one of circular and elliptical.

Claim 38 (Withdrawn) An elongated collagen sponge according to claim 37, and having outer dimensions allowing the sponge to be used for at least one of:

- closing wounds,
- re-establishing walls in a mammalian gastrointestinal funnel system.

Claim 39 (Withdrawn) An elongated collagen sponge according to claim 37, wherein the passage has diagonal dimensions corresponding to cross-sectional dimensions of mammalian gastrointestinal funnels.

Claim 40 (Withdrawn) An elongated collagen sponge according to claim 39 having outer dimensions corresponding to the inner dimension of the human rectum, so as to make the sponge suitable for being applied to the rectum wall.

Claim 41 (Previously Presented) A method according to claim 7, wherein the organic acid is lactic acid.

Claim 42 (Previously Presented) A method according to claim 8, wherein the alcohol is ethanol.

Claim 43 (Previously Presented) A method according to claim 10, wherein the acid has a pH value in the range of 1.5 to 3.5.

Claim 44 (Previously Presented) A method according to claim 43, wherein the acid has a pH value in the range of 2.5 to 3.0.